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EXAMINER

CHOW, CHARLES CHIANG

ART UNIT

PAPER NUMBER

2685

DATE MAILED: 11/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,854

Applicant(s)

MAHONEY, JEROME R.

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

Claim Objections

1. Claims 6, 9, 19 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The self dependency in claims 6, 9, 19, are improperly formed of having "The dialing system of claim 6" in claim 6, "The dialing system of claim 9" in claim 9, and "The dialing system of claim 19" in claim 19, to be dependent upon their self respectively. Correction is required.

The following claim rejection is examined utilizing the dependency that, claim 6 is dependent upon claim 5, claim 9 is dependent upon claim 1, claim 19 is dependent upon claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (US 5,912,949) in view of Vulcan et al. (US 5,799,072).

Regarding **claim 1**, Chan et al. (also as Chan in below) teaches a speech enabled automatic name dialer dialing system (abstract, Fig. 1) for connection to a telephone system (PBX

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system 310, Fig. 2) utilizing a user computer (microprocessor 340, 440 in Fig. 2-3, standard computer, personal computer, and Pentium processor, col. 6, lines 24-38), having a computer base address book program for retrieval of name-telephone number data (directory for retrieving name and telephone in col. 2, lines 8-33; col. 3, lines 35-47 and abstract; the program-speech recognition engine running on computer for retrieval matched name from directory, col. 4, lines 19-34).

Chan teaches the creation of speech enabling phoneme sets for auto dialing by speaking a name (col. 4, lines 24-39) utilizing telephone application programming interface (software in col. 4, lines 5-8, executing software control procedure, col. 6, line 57-64), for use with telephones with private branch exchanges (Fig. 2, telephones 352,354,356,358, Pbx 310, to public switches telephone network, col. 5, line 61 to col. 6, line 21).

Chan teaches the at least one user computer (microprocessor 340, 440 in Fig. 2-3, standard computer, personal computer, and Pentium processor, col. 6, lines 24-38) having microphone and speaker (col. 6, lines 51-56), the telephone application program interface provider installed in user computer (software in col. 4, lines 5-8, executing software control procedure, col. 6, line 57-64), the memory for storing, managing and supporting name-telephone number data (directory in col. 2, lines 8-33; col. 3, lines 35-47, retrieval matched name from directory to identify telephone number, col. 4, lines 10-34).

Chan teaches the software having functional capabilities for accessing name-telephone data contained in computer (the speech recognition engine running on computer for retrieval matched name from directory to identify a associated telephone number, col. 4, lines 19-34), creating converted phonemes from name-telephone data (the converting between phoneme

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and orthographic representation in col. 4, lines 24-34), the receiving voice input from microphone connected to user computer (voice input in col. 6, lines 54-56), the matching phonemes and voice inputs from retrieved name-telephone data for automatic dialing (abstract).

Chan does not clearly teach the signaling to a router and to a private branch exchange to initiate a dialing of a telephone number and to effect a telephone call within a telephone system.

Vulcan et al. (also as Vulcan in below) teaches the signaling to a router (a personal computer 104 had internal router 32 and dialer 110, Fig. 2-3, Fig. 13; col. 8, lines 35-48; col. 8, line 60 to col. 9, line 12), and to a private branch exchange (PBX 32, Fig. 2, col. 9, lines 27-32) to initiate a dialing of a telephone number and to effect a telephone call (the local client computer determines an optimum route and transmitting the dial string to line unit in abstract) within a telephone system (system in Fig. 1, col. 7, lines 47-65). Vulcan teaches an improved technique for routing a telephone call with reduced charge (col. 2, line 64 to col. 3, line 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chan above, and to include Vulcan's computer dialer 110, router 32 for efficient call connection management, such that the system could efficiently route the telephone call with reduced charge.

Regarding **claim 2**, Chan teaches the software function for prompt user to take a prescribed action ("who do you want to call", "did you say <name>", in steps 140, 230, Fig. 1) for the unmatched name from voice input.

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Regarding **claim 11**, Chan teaches a speech enabled automatic name dialer dialing system for connection to a telephone system utilizing a user computer having a computer base address book program (col. 3, lines 35-42, speech engine running on computer for converting to phonemes) for retrieval of name-telephone number data and to creation of speech enabling phoneme sets for auto dialing by speaking a name using application program (col. 4, lines 5-9). Chan teaches the telephones, the private branch exchanges for autodialing (Fig. 2, telephones 352,354,356,358, Pbx 310, to public switches telephone network, col. 5, line 61 to col. 6, line 21).

Chan has shown (above) the at least one user computer (microprocessor 340, 440 in Fig. 2-3, standard computer, personal computer, and Pentium processor, col. 6, lines 24-38) having microphone and speaker (col. 6, lines 51-56), the telephone application program interface in user computer (software in col. 4, lines 5-8, executing software control procedure, col. 6, line 57-64), the memory supporting name-telephone number data (directory in col. 2, lines 8-33; col. 3, lines 35-47, retrieval matched name from directory to identify telephone number, col. 4, lines 10-34), the address book, directory in computer (col. 3, lines 35-41; col. 4, lines 10-18).

Chan has shown above the claimed features for: the software having functional capabilities for accessing name-telephone data contained in computer, creating converted phonemes from name-telephone data, the receiving voice input, the matching phonemes and voice inputs from retrieved name-telephone data for automatic dialing.

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Chan does not clearly teach the internal network router for telephone call via private branch exchange Pbx, and the signaling to a router and to a private branch exchange to initiate a dialing of a telephone number and to effect a telephone call within a telephone system.

Vulcan teaches the signaling to a router (router 32 in personal computer 104, Fig. 2) and to a private branch exchange (PBX 32, Fig. 2) to initiate a dialing of a telephone number and to effect a telephone call (the local client computer determines an optimum route and transmitting the dial string to line unit in abstract) within a telephone system (system in Fig. 1, col. 7, lines 47-65). Vulcan teaches an improved technique for routing a telephone call with reduced charge (col. 2, line 64 to col. 3, line 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chan above, and to include Vulcan's computer dialer 110, router 32 for efficient call connection management, such that the system could efficiently route the telephone call with reduced charge.

Regarding **claim 12**, referring to claim 2 above, Chan teaches the software function for prompt user to take a prescribed action ("who do you want to call", "did you say <name>", in steps 140, 230, Fig. 1) for the unmatched name from voice input.

3. Claims 3-4, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of Vulcan, and further in view of Barber (US 6,198,947B1).

Regarding **claim 3**, in the above, it does not clearly teach the prompt a user to speak a phone number when the voice inputted name does not match stored name-telephone data, and the

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converting voice inputted telephone numbers into signal for autodialing, although Chan has taught above a autodialing system utilizing software.

Barber teaches the requesting user to speak a telephone number to be dialed, in a voice activated vehicular telephone system (col. 37, lines 34-37, col. 1, lines 15-17). Barber teaches the voice processing unit 166, the software running on DSP for hands free operation (col. 7, line 24-33). Barber teaches the technique for efficient voice activated dialing having user to speak a telephone number, such that the system can directly dial the telephone number using the voice inputted telephone number. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chan above, and to include Barber's prompt user to speak a telephone number for the voice activated dialing, such that the system could efficiently dial a telephone number by using the voice inputted telephone number.

Regarding **claim 4**, Barber has taught the prompt user to speak name and telephone number during the call-in-process mode and in the idle mode (as shown in abstract), for the prompt user to input name-telephone number to that computer, and returning to autodialing of user request name.

Regarding **claim 13**, referring to Barber above for the prompt to user to speak a phone number when a voice imputed name does not match stored available stored name-telephone data.

Regarding **claim 14**, Barber has taught the prompt user to speak name and telephone number during the call-in-process mode and in the idle mode (as shown in abstract), for the prompt

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user to input name-telephone number to that computer, and returning to autodialing of user request name.

4. Claims 5-6, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of Vulcan, and further in view of Tatchell et al. (US 5,905,774).

Regarding **claim 5**, in the above, it does not clearly teach the select telephone number from more than one telephone number.

Tatchell et al. (also as Tatchell in below) teaches the more than one telephone number to select (as shown in Fig. 5b) for the voice dialing based on the spoken name in contact data base (Fig. 5b; col. 13, lines 3-17; col. 19, lines 40-44, abstract). Tatchell teaches the audible choice prompt for selecting telephone number from groups, home, office, fax, cell, answering service and combinations (as shown in abstract, voice dialing using spoken name, in col. 19, lines 40-44, col. 5, lines 5-10, the contact database in Fig. 5b, for the voice dialing using the spoken name as shown in Fig. 5b, for home, cellular, work office, by using the personal agent). Tatchell teaches the personal agent enables subscribers to manage outgoing calls using commands from speech (col. 7, lines 12-16) at different locations (col. 7, lines 2 to 10). Tatchell teaches an improved technique for voice dialing to different places, home, business, cellular or other telephone number (col. 3, lines 11-46), based on the spoken name in the contact database. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chan above, and to include Tatchell's telephone selection from home, cellular, work, office based on spoken name in contact database, such that the

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user could efficiently contact other telephone number based on the spoken name in the contact data base.

Regarding **claim 6**, Tatchell has taught above (Fig. 5b, col. 13, lines 3-17; col. 19, lines 40-44) for the more than one telephone number to call using spoken name in contact database.

Tatchell teaches the selection via audible-choices, the selection using spoken name as shown above.

Regarding **claim 15**, referring to Tatchell above in claim 5 for the prompting user for selecting telephone number from more than one telephone number.

Regarding **claim 16**, referring to Tatchell in claim 5 above for the audible spoken name for the more telephone numbers in groups for, home, cellular office or other telephone number in combination.

5. Claims 7-8, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of Vulcan, and further in view of Will (US 5,917,891).

Regarding **claim 7**, Chan has taught above the startup dialer program, the speech engine, the user speaks activation and keyboard (460, Fig. 3), the software (col. 4, lines 5-9) for queries user for contact name (in steps 110,140,230, Fig. 1), the one name is found for autodialing.

In the above, it does not clearly teach the if contact name not found, dialer does not dial and await further input, if number found, effect automatic dialing, if not, default to caller.

Will teaches the prompting user to select one telephone number from the set and then, initiating a telephone call to the selected number (col. 22, lines 30-33; col. 25, lines 14-15).

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Will teaches the no more names (Fig. 2) into step 260-"who do you want to call" (Fig. 2), for the if not name found, and the process moving to step 215-"user has spoken ?", if no, looping back to step 215 for awaiting further input. Will teaches in step 240-"response from user?" (Fig. 2) and then, defaulting to user/caller at step 215. Will teaches the voice dialing using predicted telephone number based on the previous model, history, and time of the day (abstract) to improve connection accuracy (col. 1, line 55 to col. 2, lines 29). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chan above, and to include Will's telephone number selection from set to improve connection accuracy, such that the system could efficiently, accurately connect user's call by reducing connection error.

Regarding **claim 8**, Chan (above) teaches that if name is not found, not in the directory, the name and telephone number can be created by using mouse 450 and keyboard 460 (col. 6, lines 39-44).

Regarding **claim 17**, referring to Chan and Will in claim 7 above for the claimed features, for the startup dialer program, the speech engine, the user speaks activation and keyboard, the software for queries user for contact name, the one name is found for autodialing, the if contact name not found, dialer does not dial and await further input, if number found, effect automatic dialing, if not, default to caller.

Regarding **claim 18**, Chan (above) teaches the claimed features for if name is not found, not in the directory, the name and telephone number can be created by using mouse 450 and keyboard 460 (col. 6, lines 39-44).

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6. Claims 9-10, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of Vulcan, and further in view of Engelbeck et al. (US 5,452,340).

Regarding **claim 9**, Chan (above) has taught the keyboard 460 (Fig. 3) for entering data and the software (Schedule+) for creating directory of names and associated telephone number (col. 4, lines 10-17).

Regarding **claim 10**, in the above, it does not clearly teach the creating new entry by voice input. Engelbeck et al. (also as Engelbeck in below) teaches the creating new entry by voice input (Fig. 4, modify add, step 90, "please speak the name", step 96, "please repeat the name again", step 128, name added, Fig. 6 add, step 170, "please speak name you wish to add").

Engelbeck teaches an improved system for voice activated dialing that user can add, change, name/telephone in the directory (abstract, Fig. 3-4; col. 1, lines 6-8), such that the new name/telephone number can be efficiently added to a directory address book. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chan above, and to include Engelbeck's adding, modifying, name/telephone in directory, such that the user could efficiently update, correct, the name and telephone number stored in a telephone directory.

Regarding **claim 19**, referring to Chan above for the keyboard 460 (Fig. 3) for entering data and the software (Schedule+) for creating directory of names and associated telephone number (col. 4, lines 10-17).

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Regarding **claim 20**, referring to Engelbeck above for the new entry is created by voice input (Fig. 4, modify add, step 90-"please speak the name", step 96-"please repeat the name again", step 128, name added, Fig. 6 add, step 170, "please speak name you wish to add").

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. US 5,991,364, November 1999, McAllister et al. teaches the phonetic voice activated dialing (abstract, Fig. 3A-4) by comparing phoneme string (step 118) and retrieving called number (step 122).

B. US 6,459,911B1, October 2002, Hijii teaches the voice inputting of telephone number for autodialing, for a portable telephone (abstract).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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or faxed to: (703) 872-9306 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Charles Chow *C.C.*

October 30, 2003.


EDWARD F. URBAN
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